



MINISTRY OF THE ENVIRONMENT

INFORMATION TECHNOLOGY

G L O S S A R Y

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The methodology for developing computer systems has changed drastically over the past few years. Instead of the old flow charts, today, entity models, data flow diagrams, etc. are used.

This new information technology introduced new terminology. Also new meanings are given to old terminology while some terms have multiple meanings. This can make it difficult to communicate clearly on information technology subjects.

The purpose of this glossary is to provide standard definitions for information technology, to be used within the Ministry of the Environment.

Updating of the glossary will be an ongoing process. New releases will be issued periodically, approximately every 6 months.

If you have any questions, suggestions or definitions that you would like to have included, please contact the Information Systems Policy and Planning Section of the Systems Information and Technology Branch.

**ABEND.**

Abnormal End of Task. Termination of a task, job, or a subsystem caused by an error that cannot be resolved by the terminated task, job, or subsystem.

**ACCESS.**

The operation of seeking, reading, or writing data on a storage unit.

**ACCESS TIME.**

The time that elapses between an instruction being given to access some data and those data becoming available for use.

**ACTION DIAGRAM.**

A diagram using nested brackets to show the structure of a program or a specification. An action diagram shows loops, conditions, case structures, escapes, database accesses, subroutine calls, and programming structures in general. The use of action diagrams are the preferred way of representing programming structures and specification structures.

**ACTION DIAGRAM EDITOR.**

A tool, usually on a personal computer, with which to build and edit action diagrams. The tool helps to enforce good structuring of programs and specifications.

**ACTIVITY ARCHITECTURE.**

A model of the activities of the enterprise consisting of an activity decomposition model and an activity dependency model.

**ACTIVITY CONTEXT.**

A broader situation or environment in which an activity occurs, that defines the input data the activity receives and the output data that must be produced.

**ACTIVITY DECOMPOSITION DIAGRAM.**

A structure showing the breakdown of activities into progressively increasing detail.

**APPLICATION.**

A program or set of programs that perform a defined set of detailed business computations and or processes.

**ASSEMBLE.**

To convert a routine coded in non machine language into actual machine language instructions. To perform some or all of the following functions: (1) translation of symbolic operation codes into machine codes; (2) allocation of storage, to the extent at least of assigning storage locations to successive instructions; (3) computation of absolute or relocatable addresses from symbolic addresses; (4) insertion of library routines.

**ASSOCIATION.**

A meaningful link between two objects e.g., entities, processes, goals, or critical success factors. Associations are used to capture data about the relationship between two objects.

**ASSOCIATION MATRIX.**

The summary, in tabular form, of the associations between elements of the same object.

**ATTRIBUTE.**

A database design term that refers to the characteristics of an Entity. Refer to ENTITY.

**ATTRIBUTE INVOLVEMENT MATRIX.**

A matrix that shows, for all attributes of an entity type, the process in which each is involved and by which actions.

**ATTRIBUTE SOURCE.**

The categorizing of an attribute as to whether its values are basic, derived, or designed. See also Basic Attribute; Derived Attribute, Designed Attribute.

**ATTRIBUTIVE ENTITY TYPE.**

An Entity Type that depends on another Entity for its existence. An attributive Entity Type results from breaking out a first normal form repeating group.

**BACK UP.**

The process of making copies of files to enable recovery of their contents in the event the originals are damaged or lost.

**BASIC ATTRIBUTE.**

An attribute whose values cannot be deduced or calculated and hence must be collected during the execution of a process.

**BENCHMARKING.**

The execution of a predefined set of test cases under production conditions in order to evaluate a system's performance.

**BSAM.**

Basic Sequential Access Method.

**BUFFER.**

An area of storage that holds data temporarily while it is being received, transmitted, read, or written. It is often used to compensate for differences in the speed or timing among devices. Buffers are used in terminals, peripheral devices, storage units, and in the CPU.

**BUSINESS AREA INFORMATION MODEL.**

A business area information model is expressed as data and activity models and represents the processes and information needed within a business area by an organization.

**BUSINESS AREA PARTITION.**

A subdivision of a business area, consisting of closely related groups of processes and data which is created for the purpose of subdividing the effort within an analysis phase of a project. The models pertaining to the partitions are progressively consolidated through this phase.

**BUSINESS EVENT.**

A significant occurrence, initiated by EXTERNAL AGENTS or by the passage of time, which triggers a process that must be recognized and responded to.

**BUSINESS FUNCTION.**

A group of business activities which together completely support one aspect of furthering the mission of the ENTERPRISE.

**BUSINESS FUNCTION DECOMPOSITION.**

A decomposition of a business function into more detailed business functions.

**BUSINESS FUNCTION DEPENDENCY.**

A dependency between two business functions which exists because information provided by one is required by the other.

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**BUSINESS PLAN.**

A high-level, strategic plan used by senior management to direct the ENTERPRISE. The plan should reference the role of the INFORMATION SYSTEMS department within the organization and its expected contribution to business strategies.

**BUSINESS STRATEGY PLANNING.**

The activity in which the objectives and strategies of the enterprise are set. This provides prime input to the information strategy planning stage.

**BUSINESS SYSTEMS ARCHITECTURE.**

A structure that represents the dependencies between the business systems of an enterprise.

**CANADIAN KEY.**

A key that uniquely identifies normalized record instances of a given type. A candidate key must have two properties: (a) Each instance of the record must have a different value on the key, so that given a key value one can locate a single instance. (b) No attribute in the key can be discarded without destroying the property.

**CANONICAL MODEL.**

A model of data which represents the INHERENT structure of that data and hence is independent of individual applications, and of the software or hardware mechanisms using the data. Neither redundant data items nor redundant associations exist in the canonical model. The canonical model should correctly represent all functional dependencies among the data items in the model. When this is done, the model contains third-normal-form groupings of data items.

**CANONICAL SYNTHESIS.**

The construction of a normalized data model by integrating separate views of data such as inputs, outputs, and user views. The views are represented formally and their integration often builds an overall canonical model. Canonical synthesis is used in conjunction with top-down entity relationship modeling to help ensure that a data model is complete.

**CATALOG.**

A directory of all files available to a computer.



**COLUMN.**

The vertical component of a table. A column has a name and a particular data type (for example, character, decimal, or integer).

**CONCATENATE.**

To link together. A concatenated data set is a collection of logically connected data sets. A concatenated key is composed of more than one data item.

**CONCEPTUAL MODEL.**

The overall logical structure of a database, which is independent of any software or data storage structure. A conceptual model often contains data objects not yet implemented in physical databases. It gives a formal representation of data needed to run an enterprise, even though certain systems in the enterprise may not yet conform to the model. Some organizations prefer the term logical model rather than conceptual model, because "conceptual" might imply that the model may never be implemented.

**CONCEPTUAL SCHEMA.**

A term used to mean the same as conceptual model. The word schema often refers to the logical representation of data which is used by a particular class of database management systems.

**CONNECTIVITY ANALYSIS.**

A technique for checking that all data flows in a process model or procedure are connected to valid source and destination objects.

**CONSERVATION ANALYSIS.**

A technique for checking that all references made to the use of data objects in a process or procedure are satisfied by the data flow model and that there is no redundancy in this model.

**CONVERGENT JUNCTION.**

A junction having more than one data flow entering it and only one data flow leaving it.

**CORPORATE INFORMATION MODEL.**

A description of the entity types, functions, processes and their interrelationships that define an organization. It consists of a corporate data model, a corporate activity model, and a corporate organizational model.

**CRITICAL SUCCESS FACTOR.**

An internal or external business-related result that is measurable and that will have a major influence on whether a business segment meets its goals.

**CRUD MATRIX.**

A tabular representation of the relationship between processes and entities with an indication as to whether the type of involvement is create, retrieve, update, delete, or a combination of these.

**DASD.**

See Direct Access Storage Device.

**DATA ANALYSIS.**

A disciplined approach to analyzing the meaning and properties of the data elements in existing clerical forms and computer files, independently from the systems that produce and use this data.

**DATA ARCHITECTURE.**

A structure that models the data of the enterprise.

**DATA DICTIONARY.**

A catalog of all data types, giving their names and structures, and information about data usage. Advanced data dictionaries have a directory function that enables them to represent and report on the cross-references between components of data and business models.

**DATA ELEMENT.**

The smallest unit of data that has meaning in describing information. The physical representation of an attribute. A data element has a specified size and format.

**DATA FLOW.**

The movement of a data view between two objects, each being a process, procedure, data store, or external agent.

**DATA FLOW DESTINATION.**

The data flow node where a data flow ends.

**DATA FLOW DIAGRAM.**

A diagram of the data flows through a set of processes or procedures. It shows the external agents that are sources or destinations of data, the activities that transform the data, and the data stores or data collections where the data is held.

**DATA FLOW JUNCTION.**

A point at which one or more incoming data flows feed into one or more outgoing data flows.

**DATA FLOW LINK.**

A segment of a data flow in a data flow diagram.

**DATA FLOW NODE.**

An element of a data flow diagram that can be connected to one end of a data flow. A data flow node can be a data flow junction, an activity, a data store, or an external agent.

**DATA FLOW ORIGIN.**

The data flow node where a data flow begins.

**DATA FLOW VECTOR.**

A one-way interface or "pipeline" that carries one data flow from an original data flow node to a destination data flow node. It signifies that the associated data flow travels from the origin to the destination.

**DATA MODEL.**

A logical map of data which represents the inherent properties of the data independent of software, hardware, or machine performance considerations. The model shows data items grouped into third-normal-form records, and shows the association among those records. The term model may be contrasted with the term schema. A schema also shows a logical representation of data, but it is usually related to a type of software representation.

**DATA STORE.**

A repository of data in any form, permanent or temporary, of which users are aware, and from which data may be read repeatedly and nondestructively.

**DATA USAGE ANALYSIS.**

A disciplined approach to documenting the ways and frequencies by which data elements are used in each location in existing systems and will be used in future systems.

**DATA USAGE MATRIX.**

A matrix that shows, for each record, field or linkage type, the procedures in which it is involved, and by which actions.

**DATA VIEW.**

A subset of the data model which specifies a grouping of entities, attributes, and relationships which is used by a computer program.

**DATABASE.**

A collection of interrelated data stored together with controlled redundancy to serve one or more applications; the data is stored so that it is independent of programs that use the data; a common and controlled approach is used in adding new data and in modifying and retrieving existing data within tables, indexes, tablespaces or indexespaces.

**DATABASE MANAGEMENT SYSTEM.**

The collection of software required for using a database, and presenting multiple different views of the data to the users and programmers. The system software manages the database, provides for logical and physical data independence, controls redundancy, and enforces integrity constraints, privacy, and security.

**DBMS.**

See DATABASE MANAGEMENT SYSTEM.

**DECOMPOSITION.**

A description of the structure or composition of an object or process as consisting of several objects of the same type, which in turn consist of more objects of the same type, and so on for an arbitrary number of levels. More broadly, any hierarchy or ordered network formed by recursive associations (or chains of associations) of a particular type between objects or processes of a particular type. The activity of analyzing an object or process so as to produce a description of this sort.

**DECOMPOSITION DIAGRAM.**

A structure that shows the breakdown of objects or processes into progressively increasing detail.

**DEFAULT VALUE.**

A predetermined value, attribute, or option that is assumed when no other is explicitly specified.

**DERIVED ATTRIBUTE.**

An attribute whose values can each be calculated or deduced from the values of other attributes.

**DESIGN AREA.**

A collection of closely related processes and entity types for which an application system is designed.

**DESIGNED ATTRIBUTE.**

An attribute that has been invented in order to overcome constraints or to simplify the operation of a system.

**DETAIL WINDOW.**

A window containing details about an object instance's description in the Encyclopedia.

**DIRECT ACCESS STORAGE DEVICE (DASD).**

A data storage unit on which data can be accessed directly at random without having to progress through a serial file such as tape. A disk unit is a direct access storage device.

**DISCRETE ATTRIBUTE.**

An attribute whose values are restricted to a defined collection of values.

**DIVERGENT JUNCTION.**

A junction having only one data flow entering it and more than one data flow leaving it.

**DSN - HAS FOUR MEANINGS.**

1. DATA SET NAME.
2. Default DB2 subsystem name.
3. DB2 TSO command processor.
4. First three characters of DB2 modules and macros.

**ELEMENTARY PROCESS.**

The smallest unit of decomposition in the process model for a business area. An elementary process is executed in response to a single triggering event and consists of a simple sequence of business procedures. It is the smallest unit of business activity of meaning to a user, which when complete leaves the business area in a self-consistent state.

**ENCYCLOPEDIA.**

A repository of knowledge about the enterprise, its goals, entities, records, organizational units, functions, processes, procedures, and application and information systems. It is populated progressively during each stage of information engineering. A dictionary contains names and descriptions of data items, processes, variables, etc. An encyclopedia contains complete coded representations of plans, models, and designs with tools for cross-checking, correlation analysis, and validation. Graphic representations are derived from the encyclopedia and are used to update it. The encyclopedia contains many rules relating to the knowledge it stores, and employs rule processing, the artificial intelligence technique, to help achieve accuracy, integrity and completeness of the plans, models, and designs.

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ENCYCLOPEDIA MODEL.

An entity model that defines the type of information that can be stored in the Encyclopedia.

## ENTERPRISE MODEL.

A description of the entity types, functions, and processes that define an enterprise and the interrelationships.

## ENTITY.

A person, place, thing, event or concept that has characteristics of interest to the enterprise. An entity is something about which we store data.

## ENTITY ANALYSIS.

A disciplined approach to understanding and documenting the things of interest to the enterprise, independently from the activities that take place in the enterprise.

## ENTITY DESCRIPTION.

All of the Attribute Types and Relationship Types that describe a particular Entity Type in the information system e.g. Employee is the entity name, address, systems branch, are attributes. Employed by (Systems Branch) is the relationship.

## ENTITY DIAGRAM.

A diagram of the Entity Types and Relationship Types between Entity Types that are of interest to an enterprise or to some subset of it.

## ENTITY IDENTIFIER.

A key that uniquely identifies an entity.

## ENTITY LIFECYCLE MATRIX.

A matrix applicable to the entities of one type, showing for each state of the entity, the processes that are valid and those which cause a change in state.

## ENTITY MODEL.

A model of the entity types, their attribute types and the relationship between entity types that represent the kind of information needed to support an organization.

## ENTITY-RELATIONSHIP DIAGRAM.

A diagram representing entity types and the relationships between them, and certain properties of the relationship, especially its cardinality and name.

**ENTITY-RELATIONSHIP MODEL.**

A detailed and structured representation of all the results of entity analysis. It contains the diagram and all the released definitions.

**EXTERNAL AGENT.**

The persons, application systems, or organizations outside the project scope with whom a process must interact and exchange information.

**EXTERNAL EVENT.**

A change in the external environment affecting the area under study. The change is recognized by a flow of incoming data.

**EXTERNAL SCHEMA.**

A user's or programmer's view of the data. A set of similarly constructed records. Synonym: subschema. See also Data Element.

**FIRST NORMAL FORM.**

An entity is in First Normal Form if it has a unique identifier and contains no repeating groups. See SECOND NORMAL FORM, THIRD NORMAL FORM.

**FIXED ATTRIBUTE.**

An attribute whose values, once established for any given entity, remain unchanged for the life of that entity e.g. Birthdate of the ENTITY employee.

**FOREIGN KEY.**

An attribute of an entity type that is an identifier of a second entity type.

**FUNCTION.**

A logical collection of processes within a business. See also Business Function.

**FUNCTION ANALYSIS.**

A disciplined approach to understanding and documenting the detailed activities in the enterprise, independent of its organization structure.

**FUNCTION DECOMPOSITION.**

The breakdown of the functions of an enterprise into progressively increasing detail.



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**FUNCTIONAL DEPENDENCE.**

A dependency between two fields, such that the value of the first determines the value of the second.

**FUNCTIONAL REQUIREMENT.**

A function-level capability or business rule identified by an organization which is necessary to solve a problem or achieve an objective.

**FUNDAMENTAL ENTITY TYPE.**

A base Entity Type that depends on no other Entity Type for its existence.

**ICON.**

A graphic symbol used to represent a particular type of object, property, or association.

**INDEX.**

A set of pointers that are ordered by the values of a specified key or keys. Indexes provide quick access to data and can also be used to enforce uniqueness on the rows in a table.

**INDEX KEY.**

The set of columns used to define the index.

**INFORMATION ENGINEERING WORKBENCH (IEW).**

Knowledge Ware, Inc.'s proprietary software product that includes several integrated software components and a central Encyclopedia that supports Information Engineering.

**INFORMATION MODEL.**

A high-level data model, describing key business entities and their relationships, but without full attribute information, reference, or intersection entities.

**INFORMATION SYSTEMS ENVIRONMENT.**

The technologies, applications portfolio, human resources, and management practices that constitute an organization's information systems capability.

**INFRASTRUCTURE.**

The basic installations and facilities on which continuance and growth of an organization depend.



**INSTANCE.**

One Actual occurrence of data.

**INTERNAL SCHEMA.**

The physical structure of the data. A description of the data in the schema as it exists physically on storage media. Synonym: data storage structure.

**ISOLATED ENTITY TYPE.**

An entity type that does not participate in any relationship.

**JUNCTION.**

The point at which a data flow divides or combines with another flow or crosses a level in the data flow model.

**K.**

Kilobyte (1024 bytes).

**KEY COMPRESSION.**

A technique for reducing the number of bits in keys; used in making indices occupy less space.

**KNOWLEDGE BASE.**

A data repository that contains both information and knowledge about applying this information within a particular context. The latter is usually expressed in the form of rules.

**LEVEL.**

The number of times the object of broadest scope has been progressively decomposed to arrive at the object being described.

**LIBRARY 1.**

1. The room in which volumes (tapes and disk packs) are stored. 2. An organized collection of programs, source statements, or object modules maintained on a direct access storage device (disk) accessible by the operating system.

**LINEAR JUNCTION.**

A junction having only one data flow entering it and only one data flow leaving it.

**LINK.**

An association or relationship between entities or records. A link is drawn as a line connecting entities or records on any entity chart or data model. The word link is more visual than association or relationship and so is sometimes preferred when referring to such lines drawn on charts.

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**LOAD MODULE.**

A program unit that is suitable for loading into main storage for execution; it is the output of a linkage editor.

**LOCAL MODEL.**

A diagram that is a subset of a global model, which represents a specific view of part of the enterprise.

**LOGICAL DATABASE.**

A database as perceived by its accessing modules; it may be structured differently from the physical database structure.

**M.**

Megabyte (1,048,576 bytes).

**MENU.**

A displayed list of available functions for selection by the operator. Sometimes called a menu panel.

**METADATA.**

Data about data; that is, the information about data which is stored in data dictionaries, data models, schemas, encyclopedias, and their computerized representation.

**METHODOLOGY.**

A guideline defining how to develop an application system. A methodology describes the managerial and technical procedures for development of an application system.

**MIGRATION ANALYSIS.**

The study of how the business area is supported by existing systems and how they may be converted or incorporated into new, more comprehensive systems.

**MIGRATION DESIGN.**

The specifying of how existing business systems and files will be gradually replaced by or interfaced with new systems.

**MILESTONE.**

A point within a project which is clearly definable and is of interest to management.

**MODEL.**

A representation of some aspect of an organization. A model built using Information Engineering techniques is stored in the Encyclopedia.

**MULTI-LEVEL DATA FLOW.**

A data flow that passes through several levels of an activity decomposition.

**MULTIPLE ASSOCIATION.**

An association between two fields such that for each value of one field it is possible to know one or more values of the associated field.

**MULTIVALUED ATTRIBUTE.**

An attribute where more than one value can describe an entity at any given time. Not valid in an entity type normalized to first normal form.

**NONPRIME ATTRIBUTE.**

An attribute that is not part of the primary key of a normalized record. Attributes that are part of the primary key are called prime attributes.

**NORMALIZATION.**

The process ensuring that data is at least third normal form.

**OBJECT TYPE.**

A class of people, places, things, or concepts having characteristics of interest to the organization.

**OBJECTIVE.**

An end or target that is achieved by accomplishing all critical success factors related to it.

**OPERATING SYSTEM.**

Software that enables a computer to supervise its own operations, automatically calling in programs, routines, language, and data as needed for continuous throughput of different types of jobs.

**PARENT.**

An object in a decomposition diagram that is immediately above at least one specified object.

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**PARENT ROW.**

A row whose primary key value is the foreign key value of a dependent row.

**PARENT TABLE.**

A table whose primary key is referenced by the foreign key of a dependent table.

**PARENT TABLE SPACE.**

A table space that contains a parent table. A table space containing a dependent of that table is a dependent table space.

**PARTITIONED DATA SET (PDS).**

A data set in direct access storage (e.g. disk) that is divided into partitions, called members, each of which can contain a program, part of a program, or data. Synonymous with program library.

**PERFORMANCE TEST.**

An evaluation of how well a system performs its functions, including speed, maximum volume, accuracy, and use of resources such as memory space.

**PERSPECTIVE.**

A user's view of an organization or of a portion of one; it is obtained by considering multiple diagrams (e.g., decomposition view, data view, or process view diagrams).

**PHYSICAL.**

An adjective, contrasted with logical, which refers to the form in which data or systems exist in reality. Data is often converted by software from the form in which they are physically stored to a form in which a user or programmer perceives them.

**PHYSICAL DATABASE.**

A database in the form in which it is stored on the storage media, including pointers or other means of interconnecting it. Multiple logical databases may be derived from one or more physical databases.

**PRIMARY INDEX.**

An index defined on the columns of the primary key.

**PRIMARY KEY.**

A unique, nonnull key that is part of the definition of a table.

**PRIME ATTRIBUTE.**

An attribute that forms all or part of the primary key of a record. Other attributes are called nonprime attributes.

**PROCESS ACTION DIAGRAM.**

A representation of a process in terms of the actions carried out on each entity involved and the conditions constraining these actions.

**PROCESS LOGIC DIAGRAM.**

A diagram showing the inherent logic of a process, in terms of the sequence in which entity types and relationships are involved.

**PROCESS MODELING.**

The Information Engineering activity that focuses on producing process models.

**PROTOTYPE.**

A representation of a system that simulates the main user interfaces so that users can understand and critique the system. Software tools are used which enable the prototype to be built quickly and modified quickly to adapt it to end-user needs. This provides an important means for user needs and capabilities. In some cases tools are used that enable the prototype to be successively added to until it becomes the full working system.

**QSAM.**

Queued Sequential Access Method.

**QUALITY CONTROL.**

A technique for evaluating the quality of a product being processed, by checking it against a predetermined standard and taking the proper corrective action if the product does not meet the standard.

**RACF.**

Resource Access Control Facility. Controls main frame security and access.

**RECURSION.**

The dependence of an activity or action on itself. An activity calling itself.

**RELATIONAL DATABASE.**

A database made up of relations that uses a database management system. It has the capability to recombine the data items to form different relations, thus giving great flexibility in the usage of data. If the database management system does not provide the functions of, or equivalent to a relational algebra, the term relational database should not be used.

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**RELATIONAL VIEW.**

A representation of part or all of an enterprise's data architecture in terms of relations.

**RELATIONSHIP.**

A defined connection between the rows of a table or the rows of two tables. A relationship is the internal representation of a referential constraint.

**RELATIONSHIP INVOLVEMENT MATRIX.**

A matrix which shows for relationships the processes in which they are involved and by which actions.

**RELATIONSHIP TYPE.**

A type of connection or association that can exist between two entities of a given type.

**RISK FACTOR.**

A feature of the environment in which a business system is to be developed which can be assessed as contributing to the likely success or failure of the development project.

**SCHEDULE.**

A plan for the performance of tasks within a project, detailing the time and resource requirements.

**SCHEMA.**

A map of the logical structure of a database.

**SECOND NORMAL FORM.**

An entity is in Second Normal Form if it is in First Normal Form and every non unique identifier attribute is fully dependent on the primary unique identifier (not just a portion of it). See First Normal Form, Third Normal Form.

**SECONDARY INDEX.**

An index composed of secondary keys rather than primary keys.

**SECONDARY KEY.**

An alternative key to the primary key. It is not used to uniquely identify a record; that is, more than one record can have the same key value. A key that contains the value of an attribute (data item) other than the unique identifier.

**SECURITY CONTROL.**

A measure by which a form of protection is given to a business system or computing environment.

**SECURITY SYSTEM.**

Hardware, software, or control data designed to prevent damage, theft, or corruption of data.

**SEQUENTIAL DATA SET.**

A data set whose records are organized on the basis of their successive physical positions, such as on magnetic tape.

**SIBLING.**

A child object in a decomposition that has the same parent object as another child.

**STAKEHOLDER.**

A key member of an organization who defines and has a significant stake in achieving the goal of the unit.

**STRATEGIC INFORMATION SYSTEMS PLAN.**

A plan that sets out the overall objectives for information systems development over a three-to five-year period.

**SUBJECT AREA.**

A major, high-level classification of data. A group of entity types that pertains directly to a function or major topic of interest to the enterprise.

**SUBSCHEMA.**

A map of a program's view of the data used. It is derived from the global logical view of the data-the schema.

**SUBSYSTEM.**

A complete, self-contained subdivision of an information system that performs one discrete function.

**SUBTREE.**

An object in a decomposition and all of its descendants.

**SYSTEM.**

An interrelated set of components that are viewed as a whole. SYNONYM: APPLICATION SYSTEM, hardware system, computer, software system.

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**SYSTEM ARCHITECTURE.**

The composite of components, and the way in which they interact, that form a computer system.

**SYSTEM DEPENDENCY.**

An association between two systems which exists because information originating in one is required by the other.

**SYSTEM DEVELOPMENT METHODOLOGY.**

A defined way of developing a business system.

**SYSTEM STRUCTURE DIAGRAM.**

A representation of the designed and defined collection of procedures, data stores, data flows, data views, and terminators which, when implemented, will make up a system.

**SYSTEM TEST.**

A test carried out on a business system to verify that as a whole, it functions as specified in the business system design specification.

**SYSTEMS LIFECYCLE.**

The stages and tasks in the development and productive use of a system from its inception to its demise.

**TECHNICAL ARCHITECTURE.**

A structure that summarizes the mixture of hardware, system software, and communication facilities which supports or will support the information systems within an enterprise.

**THIRD NORMAL FORM.**

An Entity is in Third Normal Form if it is in Second Normal Form and every non unique identifier attribute is fully dependent on the primary identifier and independent of each other. See First Normal Form, Second Normal Form.

**TRANSACTION SCREEN.**

A screen that accepts business transactions as input to an application.

**TSO.**

Time Sharing Option. Provides interactive time sharing from remote terminals. A subsystem of MVS.



**UNIQUE IDENTIFIER.**

An Attribute Type that uniquely identifies an Entity Type.

**UNIQUE INDEX.**

A specific index that guarantees the uniqueness of the values of a key or set of keys in a table.

**USER.**

Any staff member in a business area who will make use of an information system.

**VIRTUAL MEMORY.**

Memory that can appear to the programs to be larger than it really is because blocks of data or program are rapidly moved to or from secondary storage when needed.

**WORK PLAN.**

A plan prepared for each phase of a project detailing tasks, resource estimates, and time schedules.

**WORKING STORAGE.**

A portion of storage, usually computer main memory, reserved for the temporary intermediate results of processing.

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